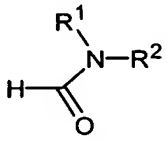
What is claimed is:

1. A process for preparing 2-amino-4,6-dichloro-5-formamidopyrimidine from 2,5-diamino-4,6-dihydroxypyrimidine or a salt thereof,
characterized in that

a) the 2,5-diamino-4,6-dihydroxypyrimidine or salt or tautomeric forms thereof is reacted with a chlorinating agent and a formamide of the formula (I)



(I),

where

R^1 and R^2 are each independently a C_1-C_4-alkyl radical, or $-R^1-R^2-$ is $-(CH_2)_n-$ where n = from 4 to 6 or $-(CH_2)_2-O-(CH_2)_2-$, without addition of a solvent at from 50 to 130°C,

b) the reaction product from stage a) is reacted at from 0 to 100°C with water and adjusted to a pH of from 1.0 to 6.0 with an inorganic base and

c) the aqueous reaction mixture from stage b) is reacted at from 70 to 120°C with hydrolysis to give 2-amino-4,6-dichloro-5-formamido-pyrimidine.

2. The process as claimed in claim 1,
characterized in that
the starting material used is 2,5-diamino-4,6-dihydroxypyrimidine as the hemisulfate, hydrochloride monohydrate or as the anhydrous hydrochloride, preferably anhydrous 2,5-diamino-4,6-dihydroxypyrimidine hydrochloride as the raw material.

3. The process as claimed in claim 1 or 2,
characterized in that
the chlorinating agent used is a reagent having the functionality of an acid chloride, preferably phosgene, oxalyl chloride, chloromethylene-dimethylammonium chloride, thionyl chloride, sulfuryl chloride, phosphorus trichloride, phosphorus pentachloride or phosphorus oxychloride, more preferably phosphorus oxychloride.

4. The process as claimed in one of claims 1 to 3,
characterized in that
the amide of the formula (I) is reacted with the chlorinating agent in a preceding step and the 2,5-diamino-4,6-dihydroxypyrimidine is only then added in portions.

5. The process as claimed in one of claims 1 to 4,
characterized in that
N,N-dimethylformamide, N-formylpyrrolidine, N-formylpiperidine or N-formylmorpholine, preferably N,N-dimethylformamide, is used.

6. The process as claimed in one of claims 1 to 5,
characterized in that
from 1.0 to 5.0 mol of amide of the formula (I) per mole of 2,5-diamino-4,6-dihydroxypyrimidine are used.

7. The process as claimed in one of claims 1 to 6,
characterized in that
from 3.0 to 7.0 mol of chlorinating agent per mole of 2,5-diamino-4,6-dihydroxypyrimidine are used.

8. The process as claimed in one of claims 1 to 7,
characterized in that
reaction step a) is effected within a temperature range from 70 to 110°C.

9. The process as claimed in one of claims 1 to 8,
characterized in that
the inorganic base used in step b) is a base which forms soluble chloride salts, preferably one or more compounds which are selected from the group of sodium hydroxide solution, sodium hydroxide, sodium carbonate, sodium hydrogencarbonate, potassium hydroxide solution, potassium hydroxide, potassium carbonate and potassium hydrogencarbonate.

10. The process as claimed in one of claims 1 to 9,
characterized in that
the base used is sodium hydroxide solution.

11. The process as claimed in one of claims 1 to 10,
characterized in that
from 2 to 3 mol of the inorganic base are used per mole of chlorinating agent.

12. The process as claimed in one of claims 1 to 11,
characterized in that
the partial neutralization in step b) is effected up to a pH of from 2.0 to 5.0, preferably from 3.0 to 4.0.

13. The process as claimed in one of claims 1 to 12,
characterized in that
the reaction product from stage a) is reacted at from 20 to 60°C.

14. The process as claimed in one of claims 1 to 13,
characterized in that
the hydrolysis in step c) is effected at a temperature of 70-120°C, preferably from 80 to 100°C.

15. The process as claimed in one of claims 1 to 13,

characterized in that
step c) is effected in the absence of a solvent.

16. The process as claimed in one of claims 1 to 15,
characterized in that
the claimed reaction is effected without isolation of intermediates, i.e. as a one-pot reaction.

17. The use of the 2-amino-4,6-dichloro-5-formamidopyrimidine prepared according to one of claims 1 to 15 for preparing purine derivatives, in particular for preparing active pharmaceutical ingredients.

18. The use of the 2-amino-4,6-dichloro-5-formamidopyrimidine prepared according to one of claims 1 to 15 for preparing active pharmaceutical ingredients, in particular for antiviral medicaments.

19. The use as claimed in claim 18 for preparing active pharmaceutical ingredients for the treatment of AIDS.